

A new species of *Ankareus* Kerremans from South Africa with notes on the Mastogeniinae (Coleoptera: Buprestidae)

by

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Ankareus capensis is described from the Cape Province of South Africa and compared with the Afrotropical members of the subfamily. The confusion created by recent works on the Mastogeniinae is briefly discussed.

INTRODUCTION

The lack of consensus during the last 30 years, along with three recent, partially contradictory, works (Cobos 1981, Toyama 1983, Holynski 1984) leave the concept of generic definition and, indeed, genera comprising the buprestid subfamily Mastogeniinae in a very confused state. The discovery of a new species of *Ankareus* Kerremans among the material sent for identification from Dr. M. Brancucci, Naturhistorisches Museum, Basel, Switzerland (NHBS) presented me with the opportunity to briefly discuss the state of mastogeniine classification. I will base my comments on the definitions of genera used by Toyama (1983), who considered the formation of the sternal cavity and the presence of propleural antennal grooves to be important generic descriptors.

The label data for *Ankareus capensis*, sp. nov., are recorded exactly as presented on the labels. Data from individual labels are enclosed within single quotation marks and separated by a semicolon. A slash mark (/) is used to separate individual lines of data on each label; more complete notations are placed within square brackets. Other institutional acronyms are BMNH = British Museum (Natural History), London, U.K., NCIP = National Collection of Insects, Pretoria and TMPS = Transvaal Museum, Pretoria.

***Ankareus capensis*, sp. nov.**, Figs 1, 2, 5a & 5b.

HOLOTYPE MALE. Small, 2,3 × 0,8 mm (maximum length vs. width); elongate ovoid, flattened; surface black with aeneous reflection; moderately covered with adpressed white setae.

Head: produced between widely separated eyes; frontovertex broadly excavated, slightly narrowing between small, widely separated. antennal insertions; eyes moderately large, slightly converging dorsally; epistome feebly emarginate; gena with narrow groove for reception of basal antennal segments beneath eye; surface moderate-

ly punctate. *Antenna*: moderately long, reaching to about basal $\frac{1}{3}$ of pronotum when laid along side; basal segments black, distal segments brunneous; segment 1 narrow, feebly geniculate; 2 shorter than 1, strongly swollen medially to more than $2\times$ thickness of 3; 3 narrow, shorter than 2 or 4; 4-10 serrate; 4 $2\times$ as long as wide; 5-10 with width to length ratio increasing distally; 11 oblong, $2\times$ as long as wide, apex attenuate; segments sparsely covered with slightly recurved testaceous setae.

Pronotum: $1.7\times$ as wide as long, widest before middle; apical margin very feebly, broadly concave; basal margin feebly concave, with impunctate transverse subelytral band, distally dentate as in *Acmaeodera*; lateral margins arcuate, feebly explanate in basal $\frac{1}{3}$; laterobasal angle obtuse; supralateral carina (Fig. 2) sinuate, not reaching apical margin; surface moderately, shallowly punctate. *Scutellum*: elongate, truncate basally, attenuate distally.

Elytra: slightly wider than pronotum, widest at about apical $\frac{1}{3}$; humerus slightly elevated, depressed centrad; base with transverse costa between humerus and scutellum; lateral margins subparallel, widening to apical $\frac{1}{3}$, then narrowing to conjointly subtruncate apex; surface transversely rugose on disc, otherwise with punctures as on pronotum.

Underside: punctuation and setation as on pronotum; prosternum with slightly indicated propleural groove, process feebly swollen posterior to procoxae, apex truncate; mesosterna completely separated by prosternal process; abdominal sternites with suture between 1 and 2 feebly indicated, slightly depressed laterally, suture between 2 and 3 evenly transverse, sutures between 3, 4 and 5 arcuate anteriorly.

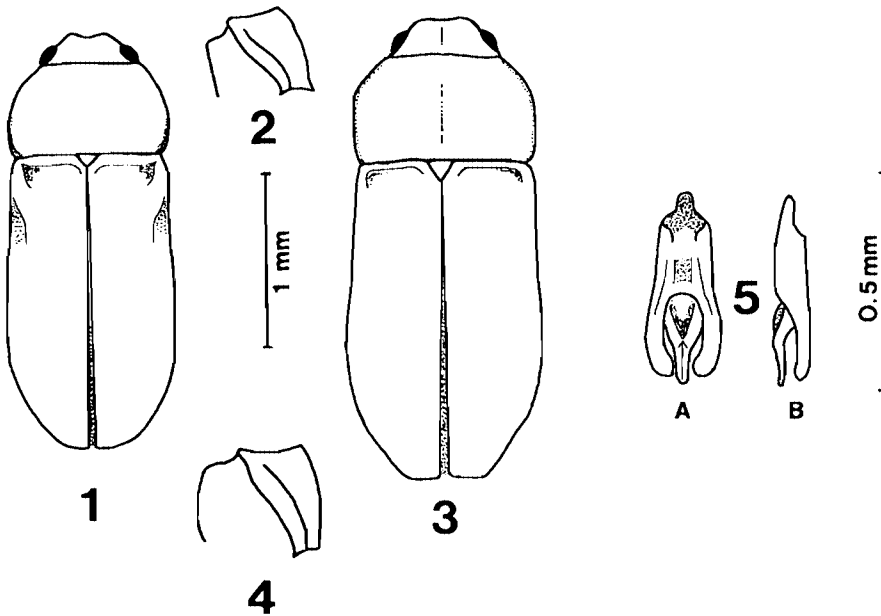
Legs: femora fusiform; tibiae feebly sinuate, distally with two short spines; metatibiae with sparse setal comb on apical $\frac{2}{3}$ of outer margin; tarsi with segment 1 as long as 2 and 3 together, subequal to 5; 1-4 with reduced pulvilli; 5 with claws swollen basally.

Genitalia: as in Figs 5a & 5b.

MATERIAL EXAMINED. Holotype male (TMPS): '12.x. / 33-30 km N Grahamstown'; 'Karoo / S.outh] Afr.ica] / W. Wittmer / 1984'.

This species is named for the Cape Province. *A. capensis* is only the second mastogeniine species to be described from southern Africa, the other being *Mastogenius felix* Waterhouse (1896) (Figs 3 & 4). Based upon the comparison of specimens reared from *Ochna arborea* (Ochnaceae) (see Anonymous 1970) in NCIP, one compared-to-type by R. D. Pope (BMNH), and specimens I recently collected in a small tract of relict forest near The Downs (N. Transvaal), the two South African mastogeniine species cannot be considered as congeneric. For identification purposes, *M. felix* is slightly larger with a different outline (Fig. 3), a different configuration of the two lateral carinae of the pronotum (Fig. 4), is entirely black, covered with testaceous setae and is known only from the northeastern Transvaal. The only other truly African mastogeniine species is *A. alluaudi* Kerremans from Kilimandjaro (Tanzania), while there are a number of described taxa from Madagascar and the Mascarene Islands.

I have compared *M. felix* with specimens of the type-species, *M. parallelus* Solier, from Chile and, using the generic definitions and key of Toyama (1983), find that *M. felix* does not fit his definition of *Mastogenius*. Even though Toyama only studied the Oriental fauna, his definition of *Mastogenius* would seem to restrict the distribution of the genus to the Neotropical region. *M. felix* immediately differs by the presence of a propleural antennal groove, a character unique to *Helperella* Cobos according to both



Figs 1, 2, *Ankareus capensis*, **sp. nov.**, Fig. 1, dorsal habitus; Fig. 2, pronotum, lateral view; Figs 3, 4, *Mastogenius felix* Waterhouse, Fig. 3, dorsal habitus; Fig. 4, pronotum, lateral view; Fig. 5, *A. capensis*, male genitalia, (a) dorsal view, (b) lateral view (scale as indicated by vertical bars).

Cobos (1957) and Toyama. I have examined several undescribed species of *Helferella* from Fiji and find that they also differ significantly from *M. felix*. However, because of the confusion that currently exists (see below), I prefer to leave this combination intact, awaiting a complete generic revision.

A. capensis is placed in *Ankareus* based upon the comparison of specimens of *A. subcyaneus* Kerremans from Madagascar, *A. mameti* Descarpentries and *A. vinsoni* Descarpentries, both from Mauritius. I find these species agree in their overall morphology as well as in the important generic defining characters used by Toyama.

CURRENT MASTOGENIINE CLASSIFICATION

As I mentioned at the outset, contradictory generic concepts have been published recently that leave the contemporary mastogeniine classification confused, at best, and in need of a thorough re-evaluation. I will briefly trace the shifting opinions in the last 30 years.

Obenberger (1957) described a fossil species, *Mastogenius primaevus*, from the Baltic amber and included a key to the genera of the subfamily, including the New Zealand genus *Maoraxia* Obenberger. However, he missed the fact that the name *Sicardia* Thérý was preoccupied and had been given a new name, *Obenbergeriella*, by Strand (1942); this name change was also overlooked by Cobos (1957 and 1981) and Holynski

(1984). In the same year, Cobos (1957) described a new mastogeniine genus, *Helperella*, from New Guinea and also provided a generic key, but did not include *Maoraxia*.

More recently Cobos (1981) discussed the entire subfamily, although most of his consideration was focused on taxa from the New World. In that work he described several new species from South America and considered the following genera to be synonyms of *Mastogenius*, *Haplostethus* LeConte, *Exaestethus* Waterhouse, *Micrasta* Kerremans and *Sicardia* Thérý with the latter three being new synonyms in that work. He also listed *Pseudianthe* Fairmaire as a new synonym of *Ankareus*, although he had proposed this synonymy in an earlier work (1979).

Toyama (1983) reviewed the Oriental mastogeniines, described two new genera, *Neomastogenius* and *Siamastogenius*, resurrected *Haplostethus* and differentiated it from *Mastogenius*. Holynski (1984) described a new tribe, Maoraxiini, for *Maoraxia*, synonymized *Sicardia* under *Ankareus* and downgraded the latter to a subgenus under *Mastogenius*. Bellamy and Williams (1985) discussed the tortured classification history of *Maoraxia* and transferred it to the 'subtribe' Anthaxiae Carter & Thérý (Buprestinae). I have recently (1986) synonymized Maoraxiini under Anthaxiini Gory & Laporte.

I have been able to examine a number of mastogeniine species from various areas, including *Mastogenius relictus* Bílý from Saudi Arabia, *Helperella frenchi* (Thérý) from Australia, *Micrasta bucki* Cobos from Brazil, several *Haplostethus* spp. from North America and Baja California, Mexico, *Exaestethus* sp. from Mexico along with the material from Chile, Fiji, Madagascar, Mauritius and South Africa discussed previously and find them to be very heterogeneous at the generic level and seemingly well-delimited within the various zoogeographical areas they inhabit.

That the Mastogeniinae is a primitive group is evidenced by the presence of the Baltic amber species described by Obenberger, the relict distribution discussed by Crowson (1981: 626), the comments of Barber (cited by Good 1925) relating the group to the Throscidae and the highly divergent wing venation (see Good 1925). In the light of such evidence, I would support the course taken by Toyama (1983), that more tightly defines the genera of various regional faunas, which I believe would give a more 'natural' picture to these survivors of a once widespread lineage.

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